

641—42.1(136C) Purpose and scope.

42.1(1) Applicability. Except as otherwise specifically provided, these rules apply to all individuals who operate as a diagnostic radiographer, nuclear medicine technologist, radiologist assistant, podiatric radiographer, or radiation therapist as defined below.

The provisions of this chapter are in addition to, and not in substitution for, any other applicable portions of 641—Chapters 38 to 41.

42.1(2) Definitions. For the purpose of this chapter, the definitions of 641—Chapter 38 may also apply.

“Approved course of study” means a curriculum and associated training and testing materials which the department has determined are adequate to train students to meet the requirements of this chapter.

“ARRT” means the American Registry of Radiologic Technologists.

“Chest” is defined as the lung fields including the cardiac shadow, as taught in the approved limited radiography curriculum. Radiography of the shoulder, clavicle, scapula, ribs, thoracic spine and sternum for diagnostic evaluation of these body structures or chest radiography using anything other than a vertical cassette holder is not allowed under this body part classification for limited diagnostic radiographers. Limited diagnostic radiographers already approved in chest radiography may perform oblique, apical lordotic, and decubitus chest views under this definition upon completion of additional training approved by this agency.

“Clinical education” means the direct participation of the student in radiographic exposures as part of the approved course of study.

“Clinical podiatric sponsor” means a person who is licensed under Iowa Code chapter 149 and who is supervising a podiatric radiography student.

“Continuing education course” means a planned program of continuing education having sufficient scope and depth of a given subject area directly related to the field of diagnostic radiography, nuclear medicine, or radiation therapy to form an educational unit that is planned, coordinated, administered, and evaluated in terms of educational objectives and that provides a defined level of knowledge or specific performance skill. This concept involves the organized presentation of a body of knowledge so that the subject matter is comprehensively covered in sufficient detail to meet the educational objectives of the course.

“Contrast media” means material intentionally administered to the human body to define a part(s) which is not normally visualized radiographically.

“Diagnostic radiographer” means an individual, other than a licensed practitioner, podiatric radiographer, or dental assistant with radiography qualification, who applies X-radiation to the human body for diagnostic purposes while under the supervision of a licensed practitioner or registered nurse under 641—subparagraph 41.1(3)“a”(7). The types are as follows:

1. “General diagnostic radiographer” applies X-radiation to any part of the human body.
2. “Limited diagnostic radiographer” applies X-radiation to only the following body parts: chest, extremities (upper and lower), spine, or sinus. This individual is restricted to performing radiography in that area of the facility specifically designed for X-ray. This individual may not perform pediatric radiography (children under three years of age) without additional training in pediatric radiography taken as a part of the basic limited training or a specifically approved training program (see 42.2(6)).
3. “Limited in-hospital radiographer” applies X-radiation as permitted in 42.3(1)“c.”

“Diagnostic radiography” means the science and art of applying X-radiation to human beings for diagnostic purposes other than in dental radiography. It shall include adjustment or manipulation of X-ray equipment and appurtenances including image receptors, positioning of patients and processing of films so as to materially affect the radiation exposure of patients.

“Directly related” means covering a subject listed in the training requirements for a specific certification.

“Formally educated” means completion of a formal course of training and testing approved by the agency.

“In vitro” means a procedure in which the radioactive material is not administered to a human being.

“In vivo” means a procedure in which the radioactive material is administered to a human being.

“Lower extremities” refers to those body parts from the distal phalanges of the foot to the head of the femur and its articulation with the pelvic girdle as taught in the approved limited radiographer curriculum. True hip radiographs are prohibited under this category for limited diagnostic radiographers. This definition applies to 641—Chapter 42 only.

“Nuclear medicine procedure” means any procedure utilizing radiopharmaceuticals for diagnosis or treatment of disease in human beings and any duties performed by the technologist during sealed source procedures and includes, but is not limited to:

1. Administration of any radiopharmaceutical to human beings for diagnostic purposes.
2. Administration of radioactive material to human beings for therapeutic purposes.
3. Use of radioactive material for diagnostic purposes involving transmission or excitation.
4. Quality control and quality assurance.

“Nuclear medicine technologist” means an individual, other than a licensed physician, who performs nuclear medicine procedures while under the supervision of a physician who is authorized by NRC or Iowa to possess and use radioactive materials.

“Podiatric radiographer” means an individual employed in a podiatry office who performs podiatric radiography but not CT or fluoroscopy.

“Podiatric radiography” means the application of X-radiation to the human foot and ankle for diagnostic purposes only.

“Quality assurance” means all aspects of a nuclear medicine program that ensure the quality of imaging and therapy procedures.

“Quality control” means specific tests and measurements that ensure the purity, quantity, product identity, and biologic safety of radiopharmaceuticals.

“Radiation therapist” means a person, other than a licensed physician, who performs radiation therapy technology under the supervision of a radiation oncologist.

“Radiation therapy technology” means the science and art of performing simulation radiography or applying ionizing radiation emitted from X-ray machines, particle accelerators, or radioactive materials in the form of sealed sources to human beings for therapeutic purposes.

“Radiologist assistant” means an advanced-level radiographer, other than a licensed practitioner, who works under the supervision of a radiologist to enhance patient care by assisting the radiologist in the diagnostic imaging environment.

“Simulation radiography” means the science and art of applying radiation to human beings for the purpose of localizing treatment fields and for treatment planning.

“Simulation therapist” means an individual, other than a physician, who applies radiation to human beings for the purpose of localizing treatment fields and for treatment planning.

“Sinus” as used in the limited radiographer curriculum refers to the paranasal sinuses only.

“Special category course” means those programs still related to health care but indirectly related to diagnostic radiography, nuclear medicine technology, or radiation therapy. Such programs are: advanced CPR, educator’s programs, management programs, personal improvement, for example.

“Spine” refers to the cervical, thoracic (dorsal), lumbar vertebrae and their articulations. It may also include the sacrum or coccyx and the sacral articulation with the pelvic girdle. True pelvis radiographs performed with the image receptor positioned perpendicular to the long axis of the torso are prohibited under this limited category. Lumbo-pelvic or full spine radiography may be performed if the long axis of the image receptor is positioned parallel with the long axis of the spine as taught in the approved limited radiographer curriculum.

“Student” means an individual enrolled in and participating in an approved course of study.

“Supervision” means responsibility for and control of quality, radiation safety and protection, and technical aspects of the application of ionizing radiation to human beings for diagnostic or therapeutic purposes. Indirect supervision is being physically present in the immediate vicinity and able to assist if needed. Direct supervision is physically observing and critiquing the actual procedure and giving immediate assistance if required.

“Upper extremities” refers to those body parts from the distal phalanges of the hand to the head of the humerus. These projections may include the acromioclavicular or glenoid-humeral areas as taught in

the approved limited radiographer curriculum. True shoulder radiography that includes both distal and proximal ends of the clavicle is prohibited under this category for limited diagnostic radiographers. This definition applies to 641—Chapter 42 only.